

Date: Mon, 15 Aug 94 04:30:28 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #237
To: Ham-Homebrew

Ham-Homebrew Digest Mon, 15 Aug 94 Volume 94 : Issue 237

Today's Topics:

 6m amplifier using vacuum tubes
 HTX-202 MOD ER2 HV BAT
 Need TCM3105 ic
 Need wide-range VCO circuit for cheap receiver project
 toroids
 Tube Receiver IF oscillates, Help
 tubes for sale
 Vacuum Tubes

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 14 Aug 94 07:18:18 -0500
From: news.delphi.com!usenet@uunet.uu.net
Subject: 6m amplifier using vacuum tubes
To: ham-homebrew@ucsd.edu

Ben Slagle <aq760@yfn.ysu.edu> writes:

>I need a schematic for a small, vacuum tube 6m amplifier... I'd
>like it to be in the area of 10 watts... nothing fancy, just a
>n amplifier I can make for cheap. Thanks.

Hi Ben,
If you can find an old tube type low band (40 - 50 mHz) two way radio,
Motorola, GE, etc, the final amp could easily be moved to 6m. These are
class C amps however if that will work for your application. Ham swap meets

are generally a good place to find these type radios.

Good luck!

Mike

Date: Sun, 14 Aug 94 02:32:00 -0600
From: netcomsv!netcomsv!aquila!alan.lyday@decwrl.dec.com
Subject: HTX-202 MOD ER2 HV BAT
To: ham-homebrew@ucsd.edu

>ER2 indicates a PLL unlock. The radio gives this error if the PLL
>alignment is off or if the transmitted signal interferes with the
>internal PLL frequency. This error has been reported most frequently
>when using the supplied "rubber ducky" antenna with either a
>high-power battery pack or with an external DC source.

>According to the memo, the fix for this is to use an external
>antenna when using external DC power.

>The memo goes on to say that if the problem persists,
>send the transceiver to the repair center.

> Marc Siegel N3MCR

Hello I found this mod in the HTX-202 mod file on a CD.
I had this same Problem using a 10v battery pack, But using the External
power Jack on the Top of the Radio and the "Rubber Duck" antenna
this problem never acured. What I found was that the Higher power resulting from
this pack was somehow getting into the Radio thru the battery terminals.
The best solution to fix this would be modifying the Radio, But for a
tempary fix since I only have one Higher voltage battery was to put a
.001 uf cap across the terminals and a ferite bead on the + lead inside
the battery. This solved the above Problem 100%
I hope this helps with anyone having this same problem. GL 73's de WC9C

* RM 1.3 00559 *

Date: Sat, 13 Aug 94 22:14:49 CST
From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!gatech!news-
feed-1.peachnet.edu!umn.edu!newsdist.tc.umn.edu!msus1.msus.edu!msus1.msus.edu!
nntp@ames.arpa
Subject: Need TCM3105 ic
To: ham-homebrew@ucsd.edu

Where can I get more information on the "Poor Man's Packet interface".

Does it have a standard serial port, or is it an internal board for a particular computer?

Any info would be appreciated.

Bill Soranno -- KB0NKX
7 Fairfax
Winona, MN 55987
507/452-3789

Date: Sun, 14 Aug 94 20:31:57 -0500
From: news.delphi.com!usenet@uunet.uu.net
Subject: Need wide-range VCO circuit for cheap receiver project
To: ham-homebrew@ucsd.edu

I would like to know if there is a circuit that has the range of a cable box VCO. It does not have to be stable (drift is ok). All the varactor tuner circuits ive seen have very narrow ranges. I am also thinking of building a spectrum analyzer with this VCO and a NE602. The PMSA is too expensive for me. And my application does not demand accuracy or even calibration.

Date: Sat, 13 Aug 94 11:17:00 -0500
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!iat.holonet.net!wwwswinc!
jim.salvino@network.ucsd.edu
Subject: toroids
To: ham-homebrew@ucsd.edu

I am looking for a couple of 88mh toroids for a project I am building - does anyone have an idea where I could locate them??????? Thanks WB2CXZ Jim

* Origin: Radio FREQS' Latham, NY (518) 782-0507 (1:267/103)

Date: Sun, 14 Aug 94 07:52:09 -0500
From: news.delphi.com!usenet@uunet.uu.net
Subject: Tube Receiver IF oscillates, Help
To: ham-homebrew@ucsd.edu

Ed Bathgate <ed@fore.com> writes:

>I started pulling tubes out and finally removed (I think) the 1st IF tube,

>a 12AX7A, the S meter went down. I swapped it with another 12AX7A (tx circuit)

Hi Ed,

Typically the IF amps are pentodes, 6CB6, 6AU6, etc. and the first place to look for oscillations is screen bypass caps (as other posters have mentioned). If the caps were shorted the IF gain would be very low....not the problem here. Try grounding each IF amp screen grid with a .01 @600v disc cap (careful! there is hi DC voltage here) and see if the oscillation is reduced or eliminated. If so replace the cap. Also, tubes can get gassy and cause all kinds of strange problems. The best bet for checking gas is replacing the tube with a known good one.

Good luck!

Mike

Date: Mon, 15 Aug 1994 02:42:00 GMT
From: newsflash.concordia.ca!vax2.concordia.ca!hirschj@uunet.uu.net
Subject: tubes for sale
To: ham-homebrew@ucsd.edu

Last week I posted a notice that I had come across a large supply of tubes. The response was rather overwhelming. In addition, the fellow who has the supply and is supposed to inventory them got the flu and has done no work on this.

Please be patient...I recorded all your messages and will get back to everyone as soon as I have anything to report.

--Jack

Date: 14 Aug 1994 14:23:10 -0400
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net
Subject: Vacuum Tubes
To: ham-homebrew@ucsd.edu

In article <93i4oc1w165w@valinor.mythical.com>, zogg@valinor.mythical.com (Jean Bulot) writes:

Do you have any 8950 Tubes? I need (4) of them for a Swan X-1200 Linear amplifier.

You can contact me at GregESP@aol.com

73's
Greg

Weremey

Date: Sat, 13 Aug 1994 20:20:11 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!math.ohio-state.edu!usc!howland.reston.ans.net!
europa.eng.gtefsd.com!library.ucla.edu!csulb.edu!csus.edu!netcom.com!
btoback@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <32ggg8\$hsh@hollywood.cinenet.net>,
<1994Aug13.082514.868@ke4zv.atl.ga.us>, <32irct\$f3u@news.tamu.edu>.g
Subject : Re: Homebrew Global Positioning System (GPS)

In article <32irct\$f3u@news.tamu.edu> gerry@cs.tamu.edu (Gerald J Creager) writes:
>[Gary Coffman writes]:

>>You aren't going to be able to get a GPS and cell phone for a couple
>>hundred dollars. The cheapest GPS receivers are around \$400, and so
>>are cell phones unless you roll their cost into a long term service
>>contract.

>
>Actually, if you shop carefully, the DGPS without a fancy display costs \$318.
>Quantity 1. It's a Motorola VP Encore core module, and it runs on 5 VDC
>(regulated), puts out TTL levels, and can receive RTCM-104S differential
>updates with Option B installed (for no cost, I might add!). Further, with
>Option B, it will put out the differential correction data, acting as a
>reference station, albeit in Motorola's Proprietary Binary format. The
>developers' manual has the full data format, making translation to the
>standard format pretty straightforward.

Where can I get more information about this device and the developers'
manual? This sounds very interesting!

>
>The cellphone could be the hard part, from a cost perspective.

In California, various places are selling the bottom-of-the-line Motorola
portable cellphone for \$100, with no activation required. (CA has a law
prohibiting anyone from requiring the purchase of cellular service with
a phone. However, you do get a VERY nasty look from the salesperson
when you say "No, I just want the phone.") It's almost getting to the
point where it's worth investigating what it would take to put one of
those phones on the 900 MHz ham band.

Incidentally, one of the earlier posters in this thread mentioned tracking
vehicles using the GPS/cellphone system. We had a demonstration here a
couple of months ago in which a ham put a GPS/APRS system in his wife's

car, and produced the resulting map for the local packet users group. The map provided an every-two-minutes location for the car for an entire day.

-- Bruce KN6MN

Date: 15 Aug 1994 04:44:19 -0000
From: news.delphi.com!news.delphi.com!not-for-mail@uunet.uu.net
To: ham-homebrew@ucsd.edu

References <ahall-0808941758330001@ruger-68.slip.uiuc.edu>,
<329jec\$4ub@news.delphi.com>, <CuDJnF.4s@comtrol.com>
Subject : Re: DSP for the HomeBrewer?? (part2)

chrise@comtrol.com (Chris Elmquist) writes:

>In article <329jec\$4ub@news.delphi.com>,
>DWILKINS@DELPHI.COM <dwilkins@news.delphi.com> wrote:
>>You might want to try the DSP Starters kit from TI. It is a small board
>>based on the TMS320C26 DSP, with debugger and assembler included. There
>>are some sample programs on the disk that implement a spectrum analyzer.
>>

>Aren't there two flavors of this board... one based on the 'C26 and another
>on the 'C56 or something ? Is the 'C56 one just a newer version of the
>eval kit but you can still get the 'C26 one ? Seems alot of the codes
>for amateur applications are for the 'C26 model...

>If I order one according to the ad in say, EE Times-- which model will I
>get ?

>Chris

>--

>Chris Elmquist, N0JCF voice: (612)631-7614
>chrise@comtrol.com fax: (612)631-8117
Chris,

I don't know of another board based on the 'C56(?). There is another processor in the C2x family called the 25-50 (50 mhz). You can get information and programs from ti.com in the directory /mirrors/tms320bbs.

I have ported the sample loader to linux, and am looking for source to an assembler to use under linux. If you run across the source to an assembler, drop me a mail.

The part number of the board that I have is TMDS3200026. I purchased

mine in December of '93. I just now have gotten the time to play with it
some, and it is fun.

N-Joy!
dhw

End of Ham-Homebrew Digest V94 #237
